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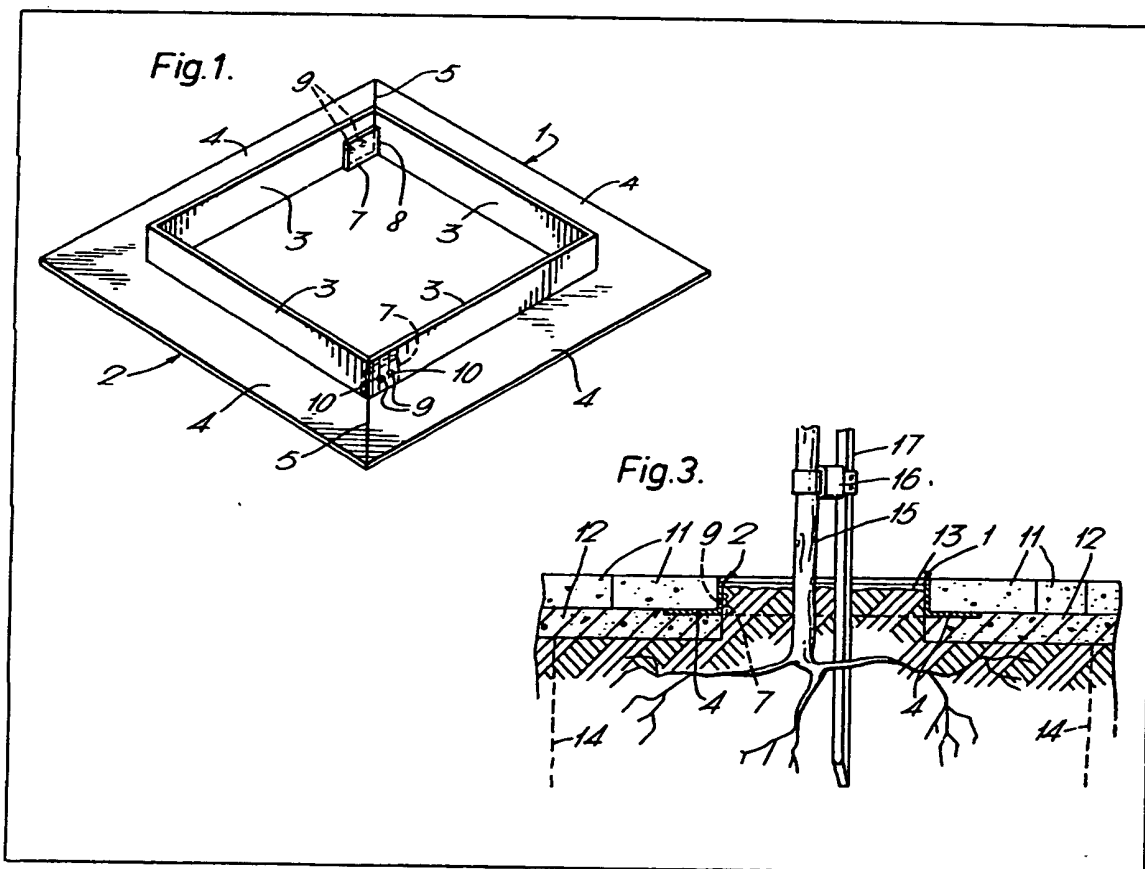
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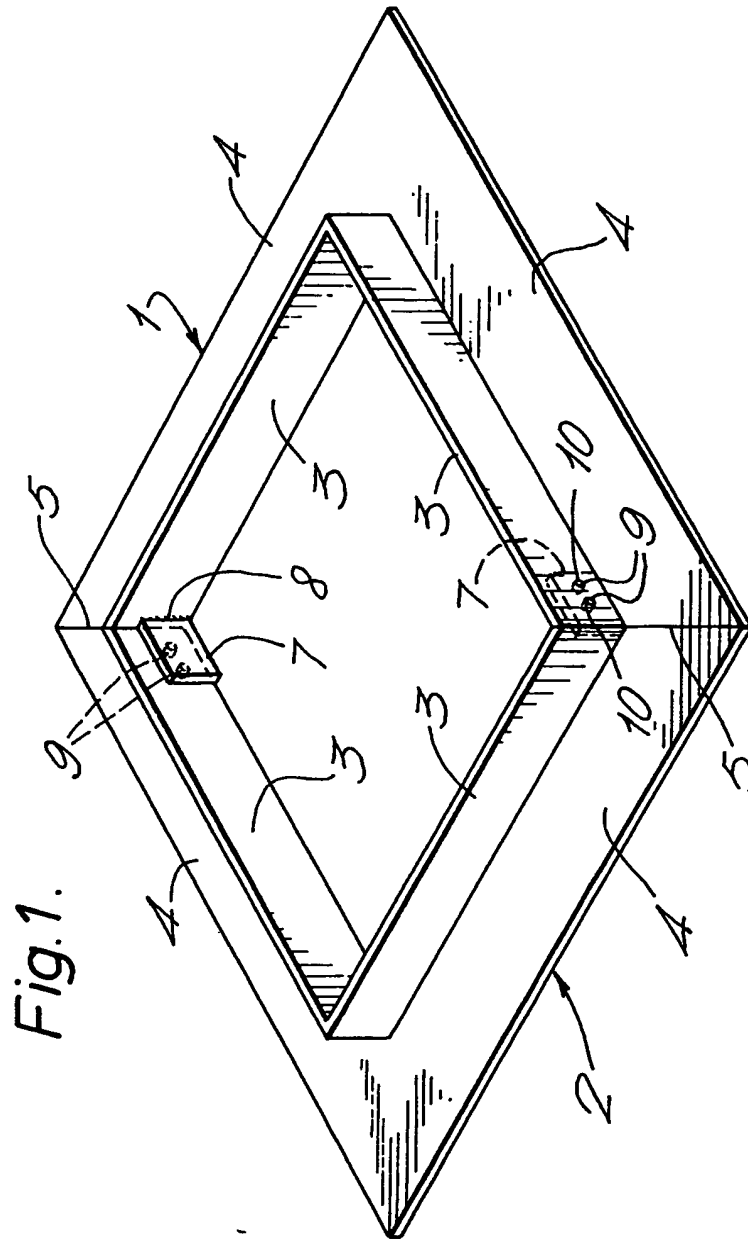
(54) Device for retaining paving
blocks around tree pits

(57) This comprises a square frame
formed by two identical L-shaped
members 1 and 2 which surround-
ing tree 15 with mitred joints 5
between them. The members are of
angle section and are detachably
fixed together by means of plate
lugs 7 welded one to each of the
members and carrying pins 9 which
fit corresponding holes 10 in up-

right flanges 3 of the other mem-
ber. Paving blocks 11 are placed
up to the outside faces of the up-
right flanges 3 over the horizontal
flanges 4 thus holding the device in
position.



GB 2 108 549 A



SPECIFICATION

Devices for retaining paving blocks around tree pits

5

It is quite common for trees to be planted or to remain growing in areas which are paved with blocks of concrete or similar materials.

To enable rain to penetrate to the roots of the trees, the paving is discontinued over an area around the trunk of each tree and this area, which is generally known as a tree pit, is filled with soil.

It is necessary to provide some means for retaining the paving blocks around the edges of the tree pit and various techniques have been used for this purpose.

The aim of the present invention is to improve on the existing means for retaining paving blocks around tree pits and to provide a device for this purpose which is cheaper and more versatile, in that it can be used with a greater variety of paving, than the device currently used.

To this end, according to this invention, such a device comprises a rectangular frame, which, in use, surrounds the tree pit and is formed of two L-shaped members having means by which they are detachably fixed to each other at diagonally opposite corners of the frame, each member being of angle cross-section with an upright flange and an outwardly projecting horizontal flange on which, in use, the paving blocks adjacent the pit are seated in contact with the outside of the upright flange.

As the frame is formed of two members which are detachably fixed to each other, the frame can easily be set in position around the trunk of a growing tree.

After the frame has been set, the paving blocks are placed and as some of the blocks are seated on the horizontal flanges of the members, the frame retains the blocks in position and also the blocks hold the frame in position.

Preferably for ease of manufacture, the two members which form the frame are the same as each other, and preferably also, the two legs of the L of each member are of equal lengths so that the frame is square.

The free ends of both members preferably fit together with mitred joints so that the horizontal flanges extend uninterruptedly around the whole frame.

The means by which the two members are detachably fixed to each other at the two diagonally opposite corners of the frame may comprise an upright plate-like lug projecting from the free end of one member at right angles to its upright flange, at least one pin fixed to and projecting from the outer face of the lug and a hole, in which the pin fits, near the end of the upright flange of the other member. Preferably there are two pins spaced

apart horizontally from each other on the lug and two corresponding holes in the upright flange of the other member. To enable the two members to be the same as each other, each member is provided with a lug with its pins at one end and with holes in its upright flange at its other end. Alternatively, of course, the pins may be welded to the upright flange of the member and the holes, into which the pins fit, may be provided in the lug.

The lugs preferably terminate below the top edges of the upright flanges so that when the tree pit is filled with soil to the level of the tops of the upright flanges, the lugs are invisible and only the top edges of the upright flanges of the frame are visible from above.

The two members of which the frame is composed are preferably of mild steel and they are then preferably protected against corrosion by a priming coat of sprayed aluminium and one or more further coats of black bituminous paint.

The present invention also consists, according to another of its aspects, in a method of retaining paving blocks around the edges of a tree pit, in which the two parts of a device in accordance with the invention described above are placed in position and are fixed to each other to form a frame extending around the tree pit, and then paving blocks are placed around the whole of the frame over the horizontal flanges of the members up to the outer faces of the upright flanges.

An example of a device and of a method in accordance with the invention will now be described with reference to the accompanying drawings in which:—

Figure 1 is a perspective view of the device;

Figure 2 is a plan view of the device in position around a tree pit within an area paved with concrete blocks; and

Figure 3 is a cross-section through the tree pit and paving shown in *Fig. 2* and showing also a tree planted in the tree pit.

As shown in *Fig. 1*, the device comprises two similar L-shaped members 1 and 2 each of which is of angle section and has an upright flange 3 and a horizontal flange 4. The free ends of the flanges 3 and 4 are mitred so that the two members 1 and 2 fit together with mitred joints 5 and the horizontal flange 4 is continuous around the whole frame formed by the members 1 and 2.

The members 1 and 2 are detachably fixed to each other at each of the mitred joints 5 by means of a plate-like lug 7 which is welded along one edge 8 to the upright flange 3 of one of the members 1 or 2. The lug 7 has two pins 9 welded to it and projecting from its outer face and the pins 9 engage in corresponding holes 10 in the upright flange of the other member of the joint 5.

In this example, the flanges 3 are each 400 mm long and 60 mm high and the flanges 4 are 100 mm wide. The members 1 and 2 are

formed from 6 mm gauge mild steel flat plate, the flanges 3 and 4 being welded to each other at their junctions.

As shown in Figs. 2 and 3, paving blocks 11 are laid on a sand bed 12. At a tree pit 13 the sand bed 12 is discontinued and the members 1 and 2 of the device shown in Fig. 1 are set on the sand bed 12 and are fixed to each other to form a frame surrounding the tree pit 13. The blocks 11 immediately surrounding the tree pit 13 are then laid as shown in dotted lines in Fig. 2 so that each block has one end overlying the flanges 4 and the other end projecting from the flanges 4 over the sand bed.

In this example, the tree pit 13 is initially excavated up to the lines 14 shown in Fig. 3 and a young tree 15 is planted in the tree pit which is then back-filled. The tree is then supported by a strap 16 from a stake 17 which is driven into the back-filled pit. After back-filling, the sand bed 12 is continued over the edges of the tree pit and then the members 1 and 2 are set in position and the paving is completed. Finally top soil is added to the tree pit 13 up to the level of the tops of the flanges 3.

CLAIMS

1. A device for retaining paving blocks around a tree pit, the device comprising a rectangular frame, which, in use, surrounds the tree pit and is formed of two L-shaped members having means by which they are detachably fixed to each other at diagonally opposite corners of the frame, each member being of angle cross-section with an upright flange and an outwardly projecting horizontal flange on which, in use, paving blocks adjacent the pit are seated in contact with the outside of the upright flange.

2. A device according to Claim 1, in which the two L-shaped members are the same as each other.

3. A device according to Claim 2, in which the two legs of the L of each member are of equal lengths so the frame is square.

4. A device according to anyone of the preceding Claims, in which the free ends of both members fit together with mitred joints so that the horizontal flanges extend uninterruptedly around the frame.

5. A device according to any one of the preceding Claims, in which the means by which the two members are detachably fixed to each other at each of the two diagonally opposite corners of the frame comprise an upright plate-like lug projecting from the free end of one member at right angles to its upright flange, at least one pin fixed to and projecting from the outer face of the lug and a hole, in which the pin fits near the end of the upright flange of the other member.

6. A device according to Claim 5, in which there are two pins spaced apart hori-

zontally from each other on the lug and two corresponding holes in the upright flange of the other member.

7. A device according to any one of Claims 1 to 4, in which the means by which the two members are detachably fixed to each other at each of the two diagonally opposite corners of the frame comprise an upright plate-like lug projecting from the free end of one member at right angles to its upright flange, at least one pin fixed to and projecting from the inside face of the end of the upright flange of the other member and a hole, in which the pin fits, in the plate-like lug.

8. A device according to Claim 7, in which there are two pins spaced apart from each other on the upright flange of the other member and two corresponding holes in the lug.

9. A device according to any one of Claims 5 to 8, in which the lugs terminate below the top edges of the upright flanges of the members.

10. A device according to anyone of the preceding Claims, in which the two members are of mild steel and are protected against corrosion by a priming coat of sprayed aluminium and one or more further coats of black bituminous paint.

11. A method of retaining paving blocks around the edges of a tree pit, in which the two members of a device in accordance with any one of the preceding Claims are placed in position and are fixed to each other to form a frame extending around the tree pit, and then paving blocks are placed around the whole of the frame over the horizontal flanges of the members up to the other faces of the upright flanges.

12. A device according to Claim 1, substantially as described with reference to Fig. 1 of the accompanying drawings.

13. A method according to Claim 11, substantially as described with reference to the accompanying drawings.

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